TITLE OF INVENTION: METHODS AND SYSTEMS FOR PROVIDING CROSSING MARKETS

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

P O Box 1450 Alexandria, Virgima 22313-1450 www.uspto.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

63710 7590 12/22/2009

INNOVATION DIVISION CANTOR FITZGERALD, L.P. 110 EAST 59TH STREET (6TH FLOOR) NEW YORK, NY 10022 EXAMINER

MONFELDT, SARAH M

ART UNIT PAPER NUMBER

3684 DATE MAILED: 12/22/2009

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/040,837	01/07/2002	Andrew C. Gilbert	02-1051	2702

 APPLN. TYPE
 SMALL ENTITY
 ISSUE FEE DUE
 PUBLICATION FEE DUE
 PREV. PAID ISSUE FEE
 TOTAL FEE(S) DUE
 DATE DUE

 nonprovisional
 NO
 \$1510
 \$300
 \$0
 \$1810
 03/22/2010

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 1SI. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and I/2 the ISSUE FIEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

INSTRUCTIONS: This appropriate. All further indicated unless correcte maintenance fee notifical	form should be used to correspondence including d below or directed off tions.	for transmitting the ISS ig the Patent, advance of herwise in Block 1, by	THE FEE and PUBLICATI orders and notification of n (a) specifying a new corres	ON FEE (if require naintenance fees will pondence address; a	 d). Blocks 1 through 5 s l be mailed to the current nd/or (b) indicating a sep 	should be completed where correspondence address a arate "FEE ADDRESS" fo	
CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)				Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.			
	N DIVISION GERALD, L.P. I STREET (6TH FI	.OOR)	Lhe	Certify	icate of Mailing or Trans	smission g deposited with the United st class mail in an envelope above, or being facsimile late indicated below.	
NEW YORK, N	Y 10022					(Depositor's name)	
						(Signature)	
						(Date)	
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR	Α	TTORNEY DOCKET NO.	CONFIRMATION NO.	
10/040,837	01/07/2002		Andrew C. Gilbert	•	02-1051	2702	
Company of the Company	WALL TARREST	10017177777	In the second second	PREV. PAID ISSUE I	EE TOTAL FEE(S) DUE	L	
APPLN, TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE				
nonprovisional	NO	\$1510	\$300	\$0	\$1810	03/22/2010	
EXAM		ART UNIT	CLASS-SUBCLASS				
MONFELDT		3684	705-037000 2. For printing on the p				
"Fee Address" ind PTO/SB/47; Rev 03-0 Number is required. 3. ASSIGNEE NAME A	ondence address (or Cha 3/122) attached. ication (or "Fee Address 2 or more recent) attach ND RESIDENCE DAT.	inge of Correspondence "Indication form and. Use of a Customer A TO BE PRINTED ON	(1) the names of up to or agents OR, alternativ (2) the name of a single registered attorney or a 2 registered patent attor listed, no name will be THE PATENT (print or typ	vely, e firm (having as a m agent) and the names meys or agents. If no printed.	sember a 2 of up to name is 3		
PLEASE NOTE: Uni recordation as set fort (A) NAME OF ASSIG	GNEE		e data will appear on the p OT a substitute for filing an (B) RESIDENCE: (CITY	and STATE OR CO	UNTRY)	ocument has been filed for	
4a. The following fee(s): Issue Fee Publication Fee (N Advance Order - #	o small entity discount j		tb. Payment of Fee(s): (Plea A check is enclosed. Payment by credit car The Director is hereby overpayment, to Depo	d. Form PTO-2038 is authorized to charge	s attached. the required fee(s), any de		
	s SMALL ENTITY state	as. See 37 CFR 1.27.			ENTITY status. Sec 37 C		
NOTE: The Issue Fee an interest as shown by the	d Publication Fee (if req records of the United Sta	uired) will not be accept ites Patent and Trademar	ed from anyone other than t k Office.	he applicant; a registe	ered attorney or agent; or t	he assignee or other party ir	
Authorized Signature				Date			
Typed or printed name				Registration No.			
This collection of inform an application. Confident submitting the complete this form and/or suggesti Box 1450, Alexandria, V Alexandria, Virginia 223	ation is required by 37 C itality is governed by 35 I application form to the ons for reducing this bu irginia 22313-1450. DO 13-1450.	EFR 1.311. The informat U.S.C. 122 and 37 CFR USPTO. Time will var rden, should be sent to to D NOT SEND FEES OR	ion is required to obtain or r k 1.14. This collection is est y depending upon the indiv he Chief Information Office COMPLETED FORMS TO	etain a benefit by the imated to take 12 min idual case. Any com r, U.S. Patent and Tr D THIS ADDRESS.	public which is to file (an nutes to complete, including ments on the amount of ti ademark Office, U.S. Dep SEND TO: Commissioner	d by the USPTO to process ag gathering, preparing, and me you require to complete artment of Commerce, P.O. for Patents, P.O. Box 1450	

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



UNITED STATES PATENT AND TRADEMARK OFFICE

NITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Offic Address: COMMISSIONER FOR PATENTS

P O Box 1450 Alexandria, Virgima 22313-1450 www.uspto.gov

DATE MAILED: 12/22/2009

APPLICATION NO.	FILIN	G DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/040,837	01/07/2002		Andrew C. Gilbert	02-1051 2702		
63710	7590	12/22/2009		EXAMINER		
INNOVATION DIVISION				MONFELDT, SARAH M		
CANTOR FITZGERALD, L.P.				ART UNIT	PAPER NUMBER	
110 EAST 59TH STREET (6TH FLOOR) NEW YORK, NY 10022				3684		

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 1180 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 1180 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 (571)-272-4200.

Application No. Applicant(s) 10/040 837 GILBERT ET AL. Notice of Allowability Examiner Art Unit SARAH M MONEFLOT 3684 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. This communication is responsive to 28 October 2009. The allowed claim(s) is/are 2,7,9,12,13,19,25,27-29,32,35-40,45 and 54-59. 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) \square All b) ☐ Some* c) ☐ None of the: 1. T Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)). * Certified copies not received: _____. Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. CORRECTED DRAWINGS (as "replacement sheets") must be submitted. (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d). 6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL. Attachment(s) 1. Notice of References Cited (PTO-892) 5. Notice of Informal Patent Application 2. Notice of Draftperson's Patent Drawing Review (PTO-948) Interview Summary (PTO-413), Paper No./Mail Date 3. Information Disclosure Statements (PTO/SB/08), 7. Examiner's Amendment/Comment Paper No./Mail Date 4. T Examiner's Comment Regarding Requirement for Deposit 8. X Examiner's Statement of Reasons for Allowance of Biological Material Other .

/Sarah M Monfeldt/ Examiner, Art Unit 3684

Art Unit: 3684

DETAILED ACTION Status of Claims

- 1. This action is in reply to the Amendment/Response filed on 28 October 2009.
- 2. Claims 2, 7, 9, 12-13, 19, 25, 27-29, 32, 35-40, 45 were amended.
- Claims 54-59 were added.
- 4. Claims 31, 33, 53 were canceled.
- 5. Claims 2,7,9,12,13,19,25,27-29,32,35-40,45 and 54-59 are Allowed.

Specification

 The specification objection has been withdrawn in view of Applicants amendment to incorporate original claims 4, 16, 12, 24, 6, 18, 7, 17, 8 and 19. Applicants Specification Amendment filed 28 October 2009 has been entered.

Claim Rejections - 35 USC § 112, first paragraph

 The 112, first paragraph rejection has been withdrawn in view of Applicants claim amendments and comments. Applicants Claim Amendment filed 28 October 2009 has been entered.

Claim Rejections - 35 USC § 101

8. The 101 has been withdrawn in view of Applicants claim amendments and comments. In particular Applicant added server to the method claims. The Examiner notes that paragraph [0028] of Applicants specification defines server as a device. Applicants Claim Amendment filed 28 October 2009 has been entered.

Art Unit: 3684

Allowable Subject Matter

 Claims 2,7,9,12,13,19,25,27-29,32,35-40,45 and 54-59 are allowed over the prior art of record.

- 10. The following is an examiner's statement of reason for allowance:
 - a. The closest prior art of record is WO/2000/026834 to RICKARD et al. discloses a crossing network that matches buy and sell orders based upon a satisfaction and quantity profile is disclosed. RICKARD et al. discloses the crossing network includes a number of trader terminals that can be used for entering orders, RICKARD et al., discloses the orders are entered in the form of a satisfaction density profile that represents a degree of satisfaction to trade a particular instrument at various (price, quantity) combinations. RICKARD et al. discloses typically, each order is either a buy order or a sell order. The trader terminals are coupled to a matching controller computer. RICKARD et al. discloses the matching controller computer can receive as input the satisfaction density profiles entered at each one of the trading terminals. RICKARD et al. discloses the matching controller computer matches orders (as represented by each trader's satisfaction density profile) so that each trader is assured that the overall outcome of the process (in terms of average price and size of fill) has maximized the mutual satisfaction of all traders. RICKARD et al. discloses typically, the matching process is anonymous and confidential. The matching process can be continuous or performed on a batch basis.
 - b. And WO/1998/012659 to RICKARD et al. discloses a computer-based system for determining a set of opening prices for a number of series of options traded on an options exchange and for allocating public order imbalances at the opening of trading. RICKARD et al. discloses market

Art Unit: 3684

makers input a current position, a desired target position and market maker orders (104) for options series from market maker terminals. RICKARD et al. discloses an order entry system receives public orders (102) for options series. RICKARD et al. discloses a controller (2) determines a set of implied volatilities (prices) for each options series that will maximize a weighted volume of trades across all options series at the opening. RICKARD et al. discloses contra orders than can be matched at the opening price are then executed. RICKARD et al. discloses if there is a residual imbalance of non-executed public orders, the residual imbalance of non-executed public orders, the residual imbalance of non-executed public orders is assigned to individual ones of the plurality of market makers so as to minimize a cumulative measure of deviation between the desired target position and the current position of each market maker. RICKARD et al. discloses the system is applicable to an options exchange, this term including any facility operating an over-the-counter market in options.

- c. And WO/2001/004817 to HARTS et al. discloses HARTS et al. an equity trading platform including an order routing system (12) and an interest matching platform (16) is provided which matches a stock transaction with other stock transactions and results in price improvement by sharing the spread between both clients is provided. HARTS et al. disclose the system advantageously also tracks the remaining number of shares of a transaction and can generate a signal indicating that a portion of the remaining shares should be traded externally from the platform.
- d. And US 20040236636A1 to Lutnick et al. discloses systems and methods for providing traders with an opportunity to trade on the VWAP price are provided. Lutnick et al. discloses after a trader enters a VWAP auction session, the trader has a predetermined amount of time (i.e., the length of the VWAP auction period) to place bids and/or offers on an item. Lutnick et al. discloses when the VWAP auction period ends, the electronic trading application matches the VWAP orders. Lutnick et al. discloses the electronic trading application collects trading information (e.g., price, size, etc.)

Art Unit: 3684

corresponding to the received orders. Lutnick et al. discloses the collected information is processed to determine the VWAP price. Lutnick et al. discloses the VWAP price is presented to the trader and the matched VWAP orders are filled based on the determined VWAP price. Lutnick et al. was however was filed after the present application and is assigned to the same assignee and is therefore not available as prior art against the present application.

- e. And Leveling the trading field to Weisul discloses eight times a day, trades will automatically be executed at the midpoint of the best bid and best ask price, eliminating spreads on those trades. Other discount brokerages that offer on-line trading, such as E*Trade Group, Inc., are looking at similar systems. Not every brokerage views retail crossing from the same perspective. Different firms offer variations on crossing that, they hope, will attract more investors and greater liquidity.
 - In regards to independent claim 7 the closest prior art of record when taken either individually or in combination with other prior arts of record fails to teach or fairly suggest:
 - a. "in which calculating the second crossing price comprises calculating an average between a midpoint of the second bid-offer liquidity spread and a last executed trade price."
 - Dependent claims 40, 54 are dependent upon independent claim 7 thus have all the limitations of claims 40, 54 are therefore, allowable for the same reason.

Art Unit: 3684

 In regards to independent claim 19 the closest prior art of record when taken either individually or in combination with other prior arts of record fails to teach or fairly suggest:

- a. "in which to calculate the second crossing price comprises to calculate an average between a midpoint of the second bid-offer liquidity spread and a last executed trade price."
- Dependent claims 59 are dependent upon independent claim 19 thus have all the limitations of claims 59 are therefore, allowable for the same reason.
- In regards to independent claim 32 the closest prior art of record when taken either individually or in combination with other prior arts of record fails to teach or fairly suggest:
 - a. "in which calculating the second crossing price comprises to calculating an average between the first crossing price and one of the buying price of the first bid-offer liquidity spread and the selling price of the first bid-offer liquidity spread."
- Dependent claims 2, 9, 12, 25, 27-29, 35-39 are dependent upon independent claim 32 thus have all the limitations of claims 2, 9, 12, 25, 27-29, 35-39 are therefore, allowable for the same reason.
- In regards to independent claim 13 the closest prior art of record when taken either individually or in combination with other prior arts of record fails to teach or fairly suggest:
 - a. "in which to calculate the second crossing price comprises to calculate an average between the first crossing price and one of the

buying price of the first bid-offer liquidity spread and the selling price of the first bid-offer liquidity spread."

 Dependent claims 45, 55-58 are dependent upon independent claim 13 thus have all the limitations of claims 45, 55-58 are therefore, allowable for the same reason.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SARAH M. MONFELDT whose telephone number is (571)270-1833. The examiner can normally be reached on Monday-Friday 7:30am-5:00pm (EST) ALT Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kambiz Abdi can be reached on (571)272-6702. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3684

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Sarah M Monfeldt/ Examiner, Art Unit 3684

/Kambiz Abdi/ Supervisory Patent Examiner, Art Unit 3684